AMENDED IN ASSEMBLY JANUARY 26, 2006 AMENDED IN ASSEMBLY MAY 11, 2005 AMENDED IN ASSEMBLY APRIL 18, 2005

CALIFORNIA LEGISLATURE—2005–06 REGULAR SESSION

ASSEMBLY BILL

No. 966

Introduced by Assembly Member Saldana

February 18, 2005

An act to add Article 14 (commencing with Section 25251) to Chapter 6.5 of Division 20 of the Health and Safety Code, relating to hazardous waste.

LEGISLATIVE COUNSEL'S DIGEST

AB 966, as amended, Saldana. Dental Hazardous waste: dental amalgam separators waste: best practices.

(1) Existing law requires the Department of Toxic Substances Control to issue hazardous waste facilities permits for the treatment of hazardous waste. A violation of the hazardous waste control laws is a crime.

This bill would require the Department of Toxic Substances Control to establish and maintain a list of approved amalgam separators meeting certain standards, as specified. The bill would require all owner or operator of a dental practices practice, on and after July 1, 2007, to install an approved amalgam separator and to implement the specified best management practices, as specified, to minimize the discharge of mercury into wastewater. The bill would exempt certain dental practices, as specified, from the requirement to install an approved amalgam separator. The bill would require the owner or operator to maintain specified records onsite, and to make the records

AB 966 -2-

available for inspection by the enforcement agency. The bill would define the enforcement agency as the local or regional agency with regulatory authority over wastewater discharges into the sanitary or combined sewer system for a jurisdiction. The bill would require all dental practices to submit documents showing the purchase and installation of an approved amalgam separator or demonstrating that it qualifies for an exemption to the enforcement agency, thereby imposing a state-mandated local program by imposing new duties upon local agencies. The bill would require an owner or operator of a dental practice to submit to the enforcement agency a \$50 fee when submitting the required documents.

Because a violation of the requirements imposed by the bill would be a crime under other, existing provisions of the hazardous waste control laws, this bill would impose a state-mandated local program by creating new crimes.

(2) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that with regard to certain mandates no reimbursement is required by this act for specified reasons.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

SECTION 1. Article 14 (commencing with Section 25251) is added to Chapter 6.5 of Division 20 of the Health and Safety Code, to read:

4 5

Article 14. Management of Mercury Dental Amalgam Best management Practices for Dental Amalgam Waste

6 7 8

9

- 25251. The Legislature finds and declares all of the following:
 - (a) Mercury is widely recognized as a toxic pollutant.
- 11 (b) Mercury, in various forms and at relatively low 12 concentrations, can cause serious health problems, including
- 13 damage to the central nervous system, kidneys, and liver.

-3- AB 966

Nervous system disorders include impaired vision, speech, hearing, and coordination.

- (c) Mercury is especially hazardous to pregnant women and children, causing such problems as birth defects and learning disabilities. Other adverse health effects include permanent brain damage, blood pressure alterations, abnormal heart function, immune system changes, and infertility.
- (d) There is no dispute within the scientific community concerning the serious ecological and health effects related to mercury. Mercury is an element that does not break down.
- (e) Under conditions that are present in waste treatment plants and natural water systems, elemental mercury, can transform into the most toxic form of mercury, methyl mercury, which bioaccumulates. In California, there is a special concern regarding the bioaccumulation of methyl mercury in the environment, in the food chain, and in the human body. The most common way for humans to be exposed to methyl mercury is by eating fish that have lived in waters contaminated by mercury.
- (f) Wastewater treatment plants typically discharge their treated wastewater into natural water systems, including lakes, rivers, bays, and the ocean. In California, biosolids collected before release of wastewater are typically spread on or incorporated into the landscape, disposed of in landfills, or burned.
- (g) In 2001, the Association of Metropolitan Sewer Agencies evaluated seven major municipal wastewater treatment plants to determine and quantify sources of mercury coming into these facilities. At all plants, dental uses of mercury were identified as the greatest contributors to the mercury-load, accounting, on average, for 40 percent of the load. Dental amalgam was more that three times greater than the next largest source of mercury in wastewater.
- (h) Dental mercury amalgam, which is used to fill cavities, typically contains about 50 percent mercury, 33 percent silver, and the balance consisting of a mix of other metals.
- (i) According to an article published in the July 2004 issue of the Journal of the California Dental Association, approximately 1,900 pounds, or nearly one ton, of mercury in the form of amalgam was discharged from dental facilities to publicly owned treatment works as a result of amalgam placements and

AB 966 —4—

removals. Assuming that 90 percent of the dental mercury is eaptured by the publicly owned treatment works, nearly 200 pounds of mercury from dental facilities are released directly into the environment.

- (j) Cities and counties, including San Francisco and Palo Alto, and other states, including Maine and Connecticut, have required dental offices to install amalgam separators, which are relatively inexpensive and require only a modest shift in dental practices to operate and maintain.
- (a) The State Water Quality Control Board establishes limits for chemicals for all local publicly owned treatment works, and the nine California regional water quality control boards are charged by the Legislature with protecting the quality of California's waters.
- (b) There is regulatory concern over the cumulative impact from the release, in waste water of mercury from all sources, including the potential release in waste water of mercury from dental amalgam.
- (c) Dental amalgam is a mixture of elemental mercury, silver, tin, and copper.
- (d) The Department of Toxic Substances Control classifies dental amalgam as a universal waste and requires dental offices to capture and recycle dental amalgam before it enters the waste stream.
 - (e) Mercury is widely recognized as a toxic pollutant.
- (f) Mercury, in various forms and at relatively low concentrations, can cause serious health problems.
- (g) Wastewater treatment plants typically discharge their treated wastewater into natural water systems, including lakes, rivers, bays, and the ocean. In California, biosolids collected before the release of that wastewater are typically spread on or incorporated into the landscape, disposed of in landfills, or burned.
- 25251.1. As used in this article, the following terms have the following meanings:
- (a) "Amalgam" means a substance consisting of elemental mercury as its principal element that is mixed with silver—and other heavy metals, tin, and copper, and is used in the restoration of a dental cavity or a broken tooth.

5 AB 966

(b) "Amalgam capsule" means a container—device in which silver alloy is intended to be mixed with mercury to form the amalgam.

- (c) "Amalgam waste" means any of the following:
- (1) Noncontact or scrap amalgam.
- (2) Contact amalgam, including, but not limited to, extracted teeth containing amalgam.
- (3) Amalgam or amalgam sludge captured by chairside traps, vacuum pump filters, screens, and other devices.
 - (4) Used amalgam capsule.

- (5) Leaking Damaged or unusable amalgam capsule.
- (d) "Approved amalgam separator" means an amalgam separator that has been demonstrated to remove 99 percent or more of the amalgam in wastewater when tested in accordance with ISO-11143 by a laboratory certified by the International Organization for Standardization.
 - (e) "Best management practices" include all of the following:
- (1) Eliminating the use of bulk elemental mercury, and recycling or disposing of, as hazardous waste, any bulk elemental mercury.
- (2) Limiting the amount of amalgam used to the smallest appropriate size for a restoration and maintaining a variety of sizes of amalgam capsules on hand to more closely match the amount triturated to the amount needed in the restoration of a tooth.
- (3) Installing and frequently changing plastic disposable chairside amalgam traps in both the vacuum system and cuspidor of each operatory where restoration work is done.
- (4) Preventing the rinsing of the disposable chairside amalgam traps in a sink.
- (5) Prohibiting the use of sodium hypochlorite to disinfect vacuum lines.
- (6) Changing vacuum pump filters and screens once per month or as directed by the manufacturer.
- (7) Storing discarded vacuum screens, including any water that may be present, in a scaled plastic airtight container with other amalgam waste.
- (8) Servicing, at least once every six months, more frequently if necessary to maintain suction, or if directed by the vacuum system manufacturer of the dry turbine vacuum unit, by a

AB 966 — 6 —

licensed amalgam recycler or hazardous waste disposal service,
 to pump out and clean the air-water separator tank.

- (9) Using a licensed recycling contractor to recycle amalgam waste or a licensed hazardous waste hauler to remove amalgam waste.
- (10) Maintaining for at least three years a written or computerized log of amalgam waste generated and amalgam waste removed from a vacuum system or plumbing.
- (11) Obtaining and maintaining, for at least three years, records of receipts or other certified documents from the recycler or hazardous waste hauler of amalgam waste recycling and disposal shipments made.
- (12) Storing amalgam waste in an airtight container.
 - (13) Following the instructions, if any, from the licensed recycler or hazardous waste hauler for the disinfection of waste and separation of contact and noncontact amalgam.
 - (14) Preventing the use of disinfectant solution with oxidizers, including, but not limited to, bleach.
 - (15) Preventing the addition of water and waste fixer to any container storing amalgam waste.
 - (16) Using a licensed hazardous waste hauler for offsite recycling of spent fixer solution or the management of that spent fixer solution as a hazardous waste.
 - (17) Maintaining a staff training log on the proper handling, management, and disposal of mercury-containing material and fixer-containing solution.

(f)

- (d) "Enforcement agency" means the local or regional agency with regulatory authority over wastewater discharges into the sanitary or combined sewer system of a jurisdiction.
- (g) "Existing dental practice" means a dental practice that is established on or before December 31, 2006.
- (h) "New dental practice" means a dental practice that is established on or after January 1, 2007.
- (i) "Responsible person" means an individual designated by a dental practice to be responsible for maintaining an approved amalgam separator.
- 38 25251.2. On and after July 1, 2006 (a) On and after July 1, 39 2007, an owner or operator of a dental practice shall implement the best management practices to reduce the amount of mercury

7 AB 966

in the wastewater. The owner or operator shall maintain, onsite, records showing the implementation of the best management practices. The records dental practice shall implement all of the following best management practices to reduce the amount of mercury in the wastewater:

- (1) Eliminate the use of bulk elemental mercury, and recycle or dispose of, as hazardous waste, all bulk elemental mercury.
- (2) Limit the amount of amalgam used to the smallest appropriate size for a restoration, and maintain a variety of sizes of amalgam capsules on hand to more closely match the amount triturated to the amount needed in the restoration of a tooth.
- (3) Install and frequently change the plastic disposable chairside amalgam traps in both the vacuum system and cuspidor of each operatory where restoration work is done.
- (4) Not rinse the disposable chairside amalgam traps in a sink.
 - (5) Not use sodium hypochlorite to disinfect vacuum lines.
- (6) Change vacuum pump filters and screens once per month, or as directed by the manufacturer.
- (7) Store discarded vacuum screens, including all water that may be present, in a sealed plastic airtight container with other amalgam waste.
- (8) Service the vacuum system, at least once every six months, or more frequently, if necessary to maintain suction.
- (9) Use a licensed recycling contractor to recycle the amalgam waste or a licensed hazardous waste hauler to remove the amalgam waste.
- (10) Maintain, for at least three years, a written or computerized log of amalgam waste generated and amalgam waste removed from a vacuum system or plumbing.
- (11) Obtain and maintain, for at least three years, records of receipts or other certified documents from the recycler or hazardous waste hauler of amalgam waste recycling and disposal shipments made.
 - (12) Store amalgam waste in an airtight container.
- (13) Follow the instructions, if any, from the licensed recycler or hazardous waste hauler for the disinfection of waste and separation of contact and noncontact amalgam.
- (14) Not use disinfectant solution with oxidizers, including, but not limited to, bleach.

AB 966 —8—

1 (15) Not add water and waste fixer to a container storing 2 amalgam waste.

- (16) Maintain a staff training log on the proper handling, management, and disposal of mercury-containing material and fixer-containing solution.
- (b) The owner or operator shall maintain, onsite, records showing that staff has been trained in the implementation of the best management practices specified in subdivision (a). The records shall be made available for inspection upon the request of the enforcement agency.
- 25251.3. (a) On or before January 1, 2007, an owner or operator of an existing dental practice shall install an approved amalgam separator to remove mercury from the wastewater.
- (b) On or before January 1, 2007, an owner or operator of an existing dental practice shall submit to the enforcement agency documents showing the purchase and installation of an approved amalgam separator.
- (c) An existing dental practice may apply, in writing, to the enforcement agency for an one-time extension of up to six months to install an approved amalgam separator. The enforcement agency shall grant the extension upon a showing of good cause justifying the requested extension.
- 25251.4. An owner or operator of a new dental practice shall install an approved amalgam separator and shall submit to the enforcement agency documents showing the purchase and installation of an approved amalgam separator before opening for business.
- 25251.5. (a) The approved amalgam separator shall be installed at either of the following locations:
 - (1) Each vacuum line that serves a dental chair.
- (2) A central location that receives vacuum line wastewater from all dental chairs in the dental practice.
- (b) An owner or operator of a facility with multiple dental practices that share a common vacuum system may install one approved amalgam separator at a location that would treat the wastewater discharged from all of the dental practices. Each dental practice in a facility described in this subdivision is deemed to be in compliance with subdivision (a).
- (e) The responsible person shall maintain the amalgam separator in accordance with the manufacturer's recommendation

-9- AB 966

and shall handle the recovered amalgam waste in accordance with the best management practice.

- (d) The responsible person shall maintain, onsite, the installation and maintenance records of the installed amalgam separator and the amalgam waste disposal records for a minimum of three years. The records shall be made available for immediate inspection upon request by the enforcement agency or its designee during normal business hours.
- 25251.6. The department shall establish, maintain, and publish, on its Internet Web site, a list of approved amalgam separators. The department shall update the list annually.
- 25251.7. A dental practice is exempt from the requirement to install an approved amalgam separator pursuant to subdivision (a) of Section 25251.3 or Section 25251.4 if any of the following applies:
- (a) The dental practice is an existing dental practice that is any of the following:
- (1) A dental practice that has, on or before January 1, 2006, installed an amalgam separator that has been demonstrated to remove at least 95 percent of the amalgam in wastewater when tested in accordance with ISO-11143 by a laboratory certified by the International Organization for Standardization for as long as that separator is functioning.
 - (2) A not-for-profit dental practice.
- (3) A dental practice with a majority of patients that are Denti-Cal recipients.
- (b) The dental practice uses an amalgam control technology that has been certified by a recognized national or international standards organization to reduce amalgam discharge into the wastewater system at a level that equals or exceeds that of an approved amalgam separator.
 - (c) The dental practice is any of the following:
- (1) Does not conduct any procedure that requires the removal
 or placement of amalgam.
 - (2) Is engaged solely in any of the following practices:
- 36 (A) Orthodontic.

- 37 (B) Periodontic.
- 38 (C) Endodontic.
- 39 (D) Oral and maxillofacial surgery.

AB 966 — 10 —

 (d) An owner or operator of a dental practice that is exempt pursuant to paragraph (2) or (3) of subdivision (a) shall submit documentation to the enforcement agency demonstrating that the dental practice qualifies for the exemption.

- (e) An owner or operator of a dental practice that is exempt pursuant to subdivision (b) shall do all of the following:
- (1) Maintain the amalgam control technology in accordance with the manufacturer's recommendations and handle the recovered amalgam waste in accordance with the best management practices.
- (2) Submit to the enforcement agency the installation and maintenance records of the amalgam control technology.
- (3) Maintain, onsite, the installation and maintenance records of the amalgam control technology and the amalgam waste disposal records for a minimum of three years.
- (4) Make available for immediate inspection the installation, certification, and maintenance records upon request by the enforcement agency or its designee during normal business hours.
- 25251.8. An owner or operator of a dental practice shall submit to the enforcement agency a processing fee of fifty dollars (\$50) along with the submission of the documentation specified by subdivision (b) of Section 25251.3, Section 25251.4, or subdivision (d) or paragraph (2) of subdivision (e) of Section 25251.7.

25251.9.

- 25251.3. This article shall not be construed to prohibit a local jurisdiction from enacting and enforcing more stringent ordinances or regulations regulating mercury discharge from dental practices.
- SEC. 2 No reimbursement is required by this act pursuant to Section 6 of Article XIIIB of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a

—11 — **AB 966**

- 1 crime within the meaning of Section 6 of Article XIII B of the2 California Constitution.